

REMARKS

The Office Action dated June 9, 2003 presents the examination of claims 1-9. Claims 4 and 5 are canceled. Claims 1-3 and 6-9 are amended. Support for subject matter added to claim 3 is found in the specification, particularly on page 3, line 26 to page 4, line 4. Claims 10-12 are added. Support for claims 10 and 11 is found in the specification, such as on page 5, lines 7-11. Support for claim 12 is found on page 5, lines 17-23. No new matter is inserted into the application.

Rejection under 35 U.S.C. 112, first paragraph

The Examiner rejects claims 1-9 under 35 U.S.C. § 112, first paragraph for allegedly containing subject matter neither described in, nor enabled by, the specification. Claims 4 and 5 are canceled, thus rendering rejection thereof moot. Applicants respectfully traverse the rejection applied to the pending claims. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

Specifically, the Examiner asserts that nucleic acid fragments of SEQ ID NOs: 1 and 2, nucleic acids in which one or more nucleotides are substituted, deleted, inserted, or added, nucleic acids having 70% identity to SEQ ID NO:1, and nucleic acids which hybridize under unspecified stringency are not enabled by, or

described in, the specification.

Claims 1 and 6 are amended to recite SEQ ID NOs: 1 and 2, respectively. The phrase "one or more nucleotides are substituted...." is deleted from the claims. Claim 2 is amended to recite an isolated nucleic acid comprising a nucleotide sequence having not less than 95% sequence identity to SEQ ID NO:1, as supported by the specification on page 3, lines 21-24. Claim 3 is amended to recite an isolated nucleic acid comprising a nucleotide sequence, the complement thereof which hybridizes with SEQ ID NO:1 under the stringent conditions of 5x Denhardt's reagent, 6XS5C, 0.5% SDS, and 50-65°C, as supported by the specification on page 3, line 26 to page 4, line 4 of the specification.

Applicants respectfully submit that the instant claims only recite subject matter that is fully enabled by, and described in, the specification, such that the requirements of 35 U.S.C. § 112, first paragraph are met. Withdrawal of the instant rejection is therefore respectfully requested.

Rejection under 35 U.S.C. § 112, second paragraph

The Examiner rejects claims 1-9 under 35 U.S.C. § 112, second paragraph for allegedly being indefinite. Claims 4 and 5 are canceled, thus rendering rejection thereof moot. Applicants respectfully traverse the rejection applied to the pending claims.

Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

The pending claims are amended to remove the indefinite language pointed out by the Examiner. Applicants respectfully submit that the instant claims particularly point out and distinctly claim the subject matter which is the present invention, such that the requirements of 35 U.S.C. § 112, second paragraph are satisfied. Withdrawal of the instant rejection is therefore respectfully requested.

On page 7, last paragraph of the Office Action, the Examiner asserts that the term "structural gene" is indefinite. Applicants respectfully disagree. The term "structural gene" is well defined in the art such that it is not an indefinite term. For this reason, the rejection thereof is improper.

On page 8, last paragraph, of the Office Action, the Examiner asserts that the recitation of "a site upstream of said structural gene" is indefinite because it is not clear how far upstream the insertion may be located. There is no particular limitation on the upstream site of insertion. However, Applicants add new claims 10 and 11, directed to the distances between the claimed nucleic acid and structural gene, and the claimed nucleic acid and promoter. These claims are supported by the specification, such as on page 5, lines 7-11.

Rejection under 35 U.S.C. § 101

The Examiner rejects claims 1-9 under 35 U.S.C. § 101 for being directed to non-statutory subject matter. Claims 4 and 5 are canceled, thus rendering rejection thereof moot. Applicants respectfully traverse the rejection applied to the pending claims. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

In order to overcome this rejection, Applicants amend "nucleic acid" to "isolated nucleic acid" in order to differentiate SEQ ID NOs: 1 and 2 from their naturally occurring counterparts. Withdrawal of the instant rejection is therefore respectfully requested.

Rejections under 35 U.S.C. § 102(b)

The Examiner rejects claims 1-8 under 35 U.S.C. § 102(b) for allegedly being anticipated by Ueki et al. (*Plant Cell and Physiology*, 40(6):618-623, 1999). Claims 4 and 5 are canceled, thus rendering rejection thereof moot. Applicants respectfully traverse the rejection applied to the pending claims. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

Ueki et al. discloses the use of the rice PLD first intron in combination with another intron. In contrast, the present invention (i.e., SEQ ID NO:1) is directed to the second intron of PDL, which is utterly different from the first intron. In this regard, the first intron disclosed by Ueki et al. does not have the sequence of SEQ ID NO:1, does not possess 95% homology to SEQ ID NO:1, and does not hybridize to SEQ ID NO:1 under the stringent conditions recited in claim 3. Thus, the disclosure of the first intron does not fall within the scope of the amended claims.

Further, the use of the first intron does not suggest the use of the second intron, because the use of the second intron produces unexpected superior results. As shown in Table 1 on page 6 of the specification, the use of the PLD second intron is much more effective than the use of the PLD first intron.

For all of these reasons, Ueki et al. fails to anticipate the present invention. Withdrawal of the instant rejection is therefore respectfully requested.

Conclusion

Applicants respectfully submit that the above amendments and/or remarks fully address and/or render moot the rejections of record. The present application is in condition for allowance. The Examiner is respectfully requested to issue a Notice of Allowance indicating that claims 1-4 and 7-12 are allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kristi L. Rupert, Ph.D. (Reg. No. 45,702) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of three (3) months to December 9, 2003, in which to file a reply to the Office Action. The required fee of \$950.00 is enclosed herewith.

Appl. No. 09/856,725

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Gerald M. Murphy, Jr., #28,977


GMM/KLR:gmh

P.O. Box 740
Falls Church, VA 22040-0747
(703) 205-8000